Best Evidence Summaries of Topics in Mental Healthcare

BEST *in* MH *clinical question-answering service*

Question

In adults with a diagnosis of dementia, how effective is occupational therapy which involves participation in daily living tasks, compared to any other intervention, in improving patient outcomes?

Clarification of question using PICO structure

Patients: Adults with a diagnosis of dementia
Intervention: Occupational therapy that involves participation in daily living tasks.
Comparator: Any other intervention.
Outcome: Improved patient outcomes.

Clinical and research implications

Evidence on the effectiveness of occupational therapy interventions which include activities of daily living tasks for improving outcomes in adults with dementia was weak. There was some evidence of positive treatment effects on depressive symptoms, cognitive and social functioning, quality of life and general health for people with mild to moderate dementia. However, a sub-group analysis of three RCTs from one systematic review found that OT interventions based on functional task activities had no effect on depressive symptoms in patients with dementia (severity of dementia un-specified). The effectiveness of OT interventions which include activities of daily living tasks in patients with more severe dementia remains uncertain. There was evidence, from one moderate quality RCT, that a specific standardised multi-component intervention (MAKS), which included ADL tasks, could be used to stabilise cognitive function and ability to perform ADL in patients with degenerative dementia over the medium term (12 months). Further larger, high quality RCTs are needed to confirm the apparent treatment effects observed in people with mild to moderate dementia and to further explore treatment effects on patients with varying severity of the disease

What does the evidence say?

Number of included studies/reviews (number of participants)
We identified one systematic review,[1] and four randomised controlled trials (RCTs),[2,3,4] which were considered relevant to this evidence summary. The systematic review included nine RCTs of various occupational therapy (OT) interventions in people with dementia; no inclusion criteria were specified for the comparator.[1] Only three of the included studies (n = 203) assessed an OT intervention which involved participation in ADL tasks (as specified by the PICO criteria for this evidence summary) and all three compared the OT intervention with usual care or no treatment;

subgroup data were reported for these studies, but severity of dementia was not recorded for the subgroup. Two of the RCTs assessed multi-component OT interventions which included ALD tasks or functional skills training alongside other components, e.g. memory training, creative activities, sensory/motor stimulation.[2,3] One of these trials compared the multi-component intervention (reactivating OT including memory training, manual/creative activities, improving sensorimotor functions and self-management in addition to functional skills training) to functional skills training alone in people with mild to moderate dementia.[2] The other compared a highly standardised intervention (MAKS), consisting of motor stimulation, practice in activities of daily living and cognitive stimulation, to usual care in people with degenerative dementia.[3] The remaining two trials compared OT interventions focusing on ADL or functional skills training with usual care; one was conducted in people with mild to moderate dementia[4] and the other did not report severity of dementia.[5]

Main Findings

The systematic review found that OT interventions based on functional task activities had no significant effect on depression; no other outcomes were reported.[1] Results from one 24 week RCT indicated that, in patients with mild to moderate dementia, the addition of reactivating OT to functional skills training resulted in significantly better scores than functional skills training alone[2] on measures of cognitive, affective, social and physical functions, depressive symptoms and well-being. A second RCT indicated that patients with degenerative dementia who received the standardised multi-component OT intervention (MAKS), remained stable with respect to cognitive function and ability to perform ADL after 12 months, where as patients in the control group (usual care) declined.[3] A third RCT reported significantly greater improvements in measures of quality of life, general health and depressive symptoms for patients with mild to moderate dementia who received OT based on ADL compared to those in the control group (usual care). The same study reported similar benefits as well as an increased sense of control for care givers.[4] The final RCT found a significant difference in the mean Physical Self-Maintenance Scale and mean goal attainment scores for patients receiving functional skills training compared to those in the control (usual care) group, but no significant difference on the Performance Test of Activities of Daily Living.[5]

Authors Conclusions

The systematic review did not report any conclusions relating to OT interventions based on functional task activities. One RCT concluded that reactivating occupational therapy has a place in the treatment of long-term geriatric patients. The second RCT concluded that the highly standardised, multi-component MAKS therapy can postpone a decline in cognitive function in dementia patients and in their ability to carry out activities of daily living for at least 12 months. The third RCT concluded that community occupational therapy is beneficial for both patients and care givers. The final RCT concluded that functional skills training produced the greatest improvement (compared to stimulation or usual care).

Reliability of conclusions/Strength of evidence

There is some evidence that OT interventions which include activities of daily living tasks may be effective in reducing depressive symptoms in patients with mild to moderate dementia. The results of two RCTs indicated that OT interventions based on activities of daily living produced significant improvements in depressive symptoms in patients with mild to moderate dementia,[4] and that the addition of reactivating OT to functional skills training resulted in greater treatment effects than functional skills training alone.[2] These trials also reported significant treatment effects on quality of

life,[4] general health,[4] and cognitive and social function.[2] By contrast, a sub-group analysis of three RCTs from one systematic review found that OT interventions based on functional task activities had no effect on depressive symptoms in patients with dementia.[1] However, it should be noted that the severity of dementia for patients included in these studies was not reported. Both the systematic review and the RCTs had significant flaws in methodological quality and/or reporting. Overall the evidence is weak, but appears to indicate a positive treatment effect for OT interventions which include an ADL component, when used in patients with mild to moderate dementia. Effectiveness in patients with more severe dementia remains uncertain. There was evidence, from one moderate quality RCT, that a specific standardised multi-component intervention (MAKS), which included ADL tasks could be used to stabilise cognitive function and ability to perform ADL in patients with degenerative dementia, over the medium term (12 months).[3]

What do guidelines say?

NICE Guidelines (2006, updated 2012, CG42) for dementia discuss occupational therapy that involves participation in daily living tasks in the following way (pp. 25);

"Health and social care staff should aim to promote and maintain the independence, including mobility, of people with dementia. Care plans should address activities of daily living (ADLs) that maximise independent activity, enhance function, adapt and develop skills, and minimise the need for support. When writing care plans, the varying needs of people with different types of dementia should be addressed."

The evidence contained in this summary is consistent with current guidelines.

Date question received: 09/09/2013
Date searches conducted: 11/09/2013
Date answer completed: 30/09/2013

References

1. Kim, S-Y., Yoo, E-Y., Jung, M-Y., Park, S-H. and Park, J-H. (2012) A systematic Review of the effects of occupational therapy for persons with dementia: A meta-analysis of randomized controlled trials. *NeuroRehabilitation 31* pp.107-115.

RCTs

2. Bach, D., Bach, M., Bohmer, F., Fruhwald, T. and Grilc, B. (1995) Reactivating Occupational Therapy: A Method to improve Cognitive Performance in Geriatric Patients. *Age and Ageing 24,* pp.222-228.

3. Graessel, E., Stemmer, R., Eichenseer, B., Pickel, S., Donath, C., Kornhuber, J. and Luttenberger, K. (2011) Non-pharmacological, multicomponent group therapy in patient with degenerative dementia: a 12-month randomized, controlled trial. *BioMed Central Medicine 9* (**129**).

4. Graff, M.J.L., Vernooij-Dassen, M.J.M., Thijssen, M., Dekker, J., Hoefnagels, W.H.L. and OldeRikkert, M.G.M. (2007) Effects of Community Occupational Therapy on Quality of Life, Mood, and Health Status in Dementia Patients and Their Caregivers: A Randomized Controlled Trial. Journal of *Gerontology 62A* (**8**), pp.1002-1009.

5. Tappen, R. M. (1994) The Effect of Skill Training on Functional Abilities of Nursing Home Residents with Dementia. *Research in nursing and Health 17* (**3**) pp. 159-165.

Guidelines

6. National Institute for Health and Care Excellence (2006, updated 2012) Dementia. Supporting people with dementia and their carers in health and social care. CG42. London: National Institute for Health and Care Excellence. **http://www.nice.org.uk/nicemedia/live/10998/30318/30318.pdf**

Results

Systematic Reviews

Author (year)	Search Date	Inclusion criteria	Number of included studies	Summary of results	Risk of bias
Kim (2012)	03/2011	*Participants* Studies were conducted in people with dementia who were eligible for inclusion. *Intervention* Studies which assessed a single occupational therapy (OT) intervention (e.g. sensory stimulation, functional task activity or environmental modification) were eligible for inclusion. *Comparator* No inclusion criteria were specified for the comparator *Outcomes* Studies which assessed the effects of OT on behavioural problems and/or depression were eligible for inclusion. Change in behavioural problems was measured by: Memory and Behaviour Problem Checklist (RMBPC); Behaviour Rating Scale (BRS); Pittsburgh Agitation Scale (PAS); Scale for the Assessment of Negative Symptom (SANS). Change in depressive symptoms measured by the Depression in Dementia (CSDD) or the Hospital Anxiety and Depression Scale	9 (total n = 751)	The aim environmental modification and functional task activity on the behavioural problems and depression in people with dementia. The review included nine studies, with a total of 751 participants. However, only three of the included studies assessed the effects of an OT intervention involving functional task activities (meeting the PICO criteria for this evidence summary). These three studies included a total of 203 participants with mean ages between 77.8 and 83.5 years. 40% of participants were male and all had a diagnosis of dementia according to DSM-IV. All three studies compared a functional task activity with no treatment or routine care. The session duration for the intervention ranged from 45 to 90 minutes, weekly or every two weeks, for 8-16 weeks. For the effects of OT interventions based on	The article reported a clear research objective and appropriate inclusion criteria were defined for the systematic review. Literature searches included four bibliographic databases and 11 online journals. However, the restriction to English language articles may have resulted in relevant studies being omitted from the review and raises the possibility of

		(HADS). *Study design* Randomised controlled trials (RCTs) published in English were eligible for inclusion.		functional task activities on depression, effect sizes ranged from 0.08 to 0.25; the pooled effect size was not statistically significant 0.15 (95% CI: −0.17 to 0.47). No other outcomes were reported for functional task activity interventions.	language bias. The review process involved two reviewers at all stages which is likely to minimise error and/or bias. The methodological quality of included studies was assessed using the PEDro scale, which includes 11 items relating to randomisation, allocation concealment, drop-out rates and blinding of assessors or therapists. The estimation of overall effect measures was of questionable value. It was not clear to what extent the

					outcome measures used in individual studies varied (details not reported). Insufficient detail of intervention and comparator groups was reported to determine whether studies were sufficiently clinically homogeneous to justify pooling.

RCTs

Author (year)	Inclusion criteria	Number of participants	Summary of results	Risk of bias
Bach et al.(1995)	*Participants* Geriatric patients, with a mean age of 83.4 years (range 65-95 years), who were consecutively admitted for long term therapy. All fulfilled the DSM-III-R criteria for slight to moderate dementia, exhibited a chronic cognitive impairment for at least 6 months. Participants were included within two weeks of admission. People with a diagnosis of psychosis or affective	n = 44 (intervention n=22, comparator n=22)	The aim of this study was to compare the effects of reactivating occupational therapy and functional rehabilitation with that of functional rehabilitation alone on levels of cognitive performance, psychosocial functioning and contentedness (estimated by ratings of subjective well-being and depression) in people with mild to moderate dementia. Intervention and comparator groups were comparable at baseline with respect to age, gender, educational level, socio-demographic background, medical morbidity, and levels of	No details of the randomisation procedure or allocation concealment were reported. Participants

	disorder were excluded. No participant was taking nootropic, antidepressant, or neuroleptic medication. *Intervention* Functional rehabilitation in addition to reactivating occupational therapy programme for 24 weeks. Reactivation treatment sessions lasted for one hour, twice weekly and included memory training, manual/creative activities, improving sensorimotor functions and self-management. *Comparator* Functional rehabilitation for 24 weeks, comprising functional occupational therapy, physiotherapy and speech therapy. *Outcome* Cognitive, affective, social and physical functions, *(Clinical Assessment Geriatric Scale (SCAG)),* depressive symptoms (*Hamilton Depression Rating Scale (HAMD) and Depression Status Inventory (DSI)),* well-being *(Scale of Well-being (B-S)),* visual retention *(Benton Test (BT)),* acquisition of information and immediate recall (*Grunberger Verbal Memory Test (GVG)),* cognitive performance, acquisition of information and the association with memory contents, passive acquisition and retention of verbal, visual and motor		cognitive performance and symptoms. Outcomes were measured at 12 and 24 weeks. After 24 weeks the intervention group had significantly better scores than the comparator l group on all measures except the number association test (ZVT-A and ZVT-B), which measures speed of cognitive performance. The mean (SD) scores, at 24 weeks, for other outcome measures were as follows: Cognitive, affective, social and physical functions: SCAG, intervention group 37.2 (13.1), comparator group 58.5 (21.6). Depressive symptoms: HAMD, intervention group 14.0 (5.7), comparator group 22.3 (9.7); DSI, intervention group 34.7 (6.5), comparator group 45.0 (9.9). Well being: B-S, intervention group 9.0 (9.9), comparator group 23.5 (15.3); BT, intervention group 6.2 (2.3), comparator group 3.4 (2.8). Cognitive performance: GVG, intervention group 21.8 (8.5), comparator group 6.8 (6.0); Number Symbol Test (ZST), intervention group 18.6 (10.6), comparator group 8.6 (8.6); Latent Learning (LL), intervention group 6.5 (1.1), comparator group 2.9 (2.2).	and psychologists who conducted outcome assessments were blind to group allocations. Data were reported for all specified outcomes, but it was not clear whether all participants were assessed at all time points.

	information (*Nuremberg Aged Persons Inventory* (*Nurnberger Alters-Inventar, NAI))*			
Graessel et al. (2011)	*Participants* Patients in German nursing homes with a diagnosis of degenerative dementia according to ICD-10 and a score of less than 24 on the Mini-Mental State Examination (MMSE). Exclusion criteria: vascular or secondary dementia; other neurological/psychiatric disease; high nursing care needs; deaf or blind. The mean age of study participants was 85.1 years. Medication use did not affect inclusion. *Intervention* MAKS; highly standardised intervention consisting of motor stimulation, practice in activities of daily living and cognitive stimulation. 6 days a week, for 2 hours for 12 months. *Comparator* Treatment as usual. *Outcomes* Cognitive function (Alzheimer's Disease Assessment Scale, ADAS-Cog) and the ability to carry out activities of daily living (Erlangen Test of ADL, E-ADL test). Secondary outcome; depressive symptoms (mood subscale of NOSGER in correlation	n=96 (intervention n=50, control n=46).	This study aimed to assess the effects of a long-term group intervention (MAKS), compared to usual care, on cognitive function and ability to perform ADL in dementia. Intervention and control groups were comparable at baseline with respect to age, gender, educational level, marital status, MMSE score, mood, care level, co-morbidities, use of anti-dementia medication, dementia symptoms and ability to perform ADL. Study participants continued to receive usual medication and nursing care and were free to participate in the regular non-MAKS activities offered by the nursing homes; participants in the control group participated in an average of two non-MAKS activities per week and participants in the MAKS group participated in an average of one non-MAKS activity per week. Outcomes were assessed after 12 months. There were 35 dropouts (19 in the MAKS group and 16 in the control group). At 12 months, cognitive function and ability to perform ADL remained stable in the MAKS group and declined in the control group. The adjusted mean differences between the two groups were: ADAS-Cog subscale -7.7 (95% CI: -14.0 to -1.4, P = 0.018); E-ADL 3.6 (95% CI: 0.7 to 6.4, P = 0.014). Regression analysis indicated that participation in MAKS was a significant predictor of cognitive function and ability to carry out ADL at 12 months and number of additional non-MAKS activities was a significant predictor of cognitive	Computer generated randomisation lists were produced for each of 5 nursing homes. No details allocation concealment were reported. The nature of the intervention precluded blinding of participants and therapists. Outcomes were independently assessed;

	with the Geriatric Depression Scale).		function at 12 months. The Cohen's d effect size of MAKS was moderate both for cognition (d = 0.45) and for the ability to perform ADL (d = 0.50). Effect sizes were higher for participants with mild to moderate dementia (MMSE 10 to 23); d = 0.67 for the ADAS-Cog subscale and d = 0.69 for the E-ADL. In all cases, ITT analyses gave lower estimates of effect sizes.	assessors were not nursing home staff and were blind to group allocations. Data were reported for all specified outcome measures and the analyses included an intention-to-treat (ITT) analysis as a sensitivity analysis.
Graff et al.(2007)	*Participants* Recruited from a memory clinic and the day clinic of the geriatrics department of a university medical centre in the Netherlands. Eligible if aged 65 years or older, had a diagnosis of mild to moderate dementia according to DSM-IV and the Brief Cognitive Rating Scale (BCRS), living in the community and had a primary caregiver who cared for them at least once a week. Patients were excluded if they had	n = 135 (intervention n= 68, control n=67)	The aim of this study was to assess the effects of community occupational therapy on dementia patients' and care givers' quality of life, mood and health status and care giver's sense of control. The baseline characteristics of patients and care givers (age, gender, patient to care giver relationship) were similar between the two groups. For patients, baseline measures of MMSE, general illness, cognition, depression and quality of life were similar between groups. For care givers, baseline measures of general health, quality of life and mastery were	Participants were randomly assigned by block randomisation (block size 4); no further details of the randomisation procedure

	a score >12 on the Geriatric Depression scale (GDS), were displaying severe behavioural or psychological symptoms of dementia, they or their carer had a severe illness, they were not on stable treatment with an anti-dementia drug, or if occupational therapy goals could not be defined. *Intervention* Occupational therapy based on a client-centred guideline for patients with dementia. Consisted of ten 1-hour sessions over 5 weeks and focussed on both patients and their informal care-givers. Based on meaningful activities chosen and defined by the participants. Aimed to optimise compensatory and environmental strategies to improve ability to perform ADL and to maintain patients' autonomy and social participation. *Comparator* Treatment as usual. *Outcomes* Quality of life (Dementia Quality of Life Instrument), health status (General Health Questionnaire), mood (Cornell Scale for Depression), behaviour (Revised Memory and Behavioural Problems Checklist), patient comorbidity (Cumulative Illness		similar between groups. Outcomes were measured at six weeks. Fifteen participants (7 in the intervention group and 8 in the control group) left the study before receiving intervention, and six participants (3 in the intervention group and 3 in the control group) dropped out just before the six-week assessment. All overall scores at six weeks, for both patients and care givers, were significantly better in the intervention group than in the control group. Patient outcomes (covariate adjusted treatment difference): Dqol overall 0.8 (95% CI: 0.6 to 1.1, $p < 0.0001$); GHQ-12 -3.5 (95% CI: -5.1 to -1.8, $p < 0.0001$); CSD -2.8 (95% CI: -4.3 to -1.3, $p < 0.0001$). Care giver outcomes (covariate adjusted treatment difference: Dqol overall 0.78 (95% CI: 0.5 to 0.9, $p < 0.0001$); GHQ-12 -4.6 (95% CI: -6.0 to -3.2, $p < 0.0001$); CES-D -7.6 (95% CI: -9.7 to -5.4, $p < 0.0001$); mastery scale 3.5 (95% CI: 2.7 to 4.4, $p < 0.0001$). 78% of participants remained in the study at 12 weeks follow-up and treatment effects were maintained.	were reported. Patient allocation used concealed envelopes. Patients and care givers were aware of group allocations, but outcome assessors were blinded. Data were not reported for some of the outcomes listed in the methods section. Analyses were ITT.

	Rating Scale for Geriatrics) and cognition (MMSE).			
Tappen (1994)	*Participants* Recruited from a nursing home population, the presence of dementia was confirmed by patient history and MMSE. Selected on the basis of a chart diagnosis of dementia according to the Short Portable Mental Status Questionnaire (Pfeiffer 1975). Exclusion criteria included evidence of stroke, head injury, major psychiatric problem or mental retardation. Mean age 84 years with a range from 59-102 years. *Intervention 1* Functional skills training, 2.5 hours per day, 5 days a week for 20 weeks. Functional skill training; focussed on regaining function in basic activities of daily living, practice, verbal prompting, physical demonstration and positive reinforcement. *Intervention 2* General stimulation, 2.5 hours per day, 5 days a week for 20 weeks. General stimulation incorporated traditionally recreationally oriented group activities provided for dementia patients in therapeutically orientated settings.	n = 63 (functional skills training n = 21, general stimulation n = 21, control n = 21)	This study aimed to compare the effects of skill training, a traditional stimulation approach, and usual care (control group) on the ability to perform ADL of nursing home residents with dementia. The baseline characteristic of participants in the three groups did not differ significantly with respect to age, gender, MMSE, number of major medical diagnoses, or functional measures (Physical Self-Maintenance Scale and Performance Test of Activities of Daily Living). The study was conducted as three series of three concurrent groups (skill training, stimulation, and no treatment control) lasting 20 weeks each. Of 72 nursing home residents initially selected, 5 were lost to transfers or illness before pre-testing was completed and an additional 4 were lost after pre-testing (unclear whether this was before or after start of treatment). Physical Self-Maintenance Scale: Adjusted post-test means indicated a significant difference between the skill training (M = 26.2) and control group (M = 22.6), $t(20) = 2.49$, $p = .01$. The stimulation group (M = 24.1) did not differ significantly from the other two groups. Performance Test of Activities of Daily Living: No significant effect of treatment over time was found on the Performance Test of Activities of Daily Living. The authors reported that the same pattern of increase for the skill training group, a smaller increase for the stimulation group and decline for the	No details of the randomisation procedure or allocation concealment were reported. Blinding of participants, study personnel and outcome assessors was not reported. Data were reported for all specified outcomes, but it was not clear whether all treated participants were included in the analyses and

	Comparator Treatment as usual comprising regular nursing care; neither skill training nor group-based stimulation activities were provided to demented residents by nursing home staff. *Outcomes* Functional level and goal attainment; (Physical Self-Maintenance Scale, Performance Test of Activities of Daily Living, goal attainment on a scale of 0 (decline) to +3 (great improvement)).		control group was observed for the adjusted post-test means (data not reported). Goal attainment on a four point scale (0 = decline to +3 = great improvement): Total scores were derived from the mean of five goal attainment ratings. There was a significant difference between the means for the three groups. The skill training group had the highest post-test mean (1.75), followed by the stimulation group (1.43) and the control group (1.10). A Tukey multiple comparison procedure, indicated a significant difference in goal attainment between the skills training group and the control group, and no significant difference between the stimulation group and the other groups.	adjusted means were missing for the Performance Test of Activities of Daily Living.

Risk of Bias: SRs

Author (year)	Risk of Bias				
	Inclusion criteria	Searches	Review Process	Quality assessment	Synthesis
Kim 2012	☺	☹	☺	☺	☹

RCTs

Study	RISK OF BIAS					
	Random allocation	Allocation concealment	Blinding of participants and personnel	Blinding of outcome assessment	Incomplete outcome data	Selective Reporting
Bach 1995	?	?	☺	☺	?	☺
Graessel 2011	☺	?	☹	☺	☺	☺
Graff 2007	?	☺	☹	☺	☺	☹
Tappen 1994	?	?	?	?	?	☹

☺Low Risk ☹High Risk ? Unclear Risk

Search Details

Source	Search Strategy	Number of hits	Relevant evidence identified
SRs and Guidelines			
NICE	Dementia AND occupational therapy	18	1
DARE	(occupation* adj2 therap*) IN DARE 164 Delete 2 (adl* or eadl*) IN DARE 104 Delete 3 (activit* adj5 daily adj2 living*) IN DARE 461 Delete 4 ((self or personal) adj5 (care or manage*)) IN DARE 452 Delete 5 ((daily or domestic or house or home) adj5 (activit* or task* or skill* or chore*)) IN DARE 193 Delete 6 (leisure) IN DARE 58 Delete 7 (Recover* adj5 function*) IN DARE 331 Delete 8 (social adj5 (activit* or function* or support* or skill* or adjust* or behaviour* or behavior* or facilitat*)) IN DARE 668 Delete 9 (dressing or feeding or eating or toilet or bathing or mobil* or driving or (public adj2 transport*)) IN DARE 1234 Delete 10 MeSH DESCRIPTOR Occupational Therapy EXPLODE ALL TREES 83 Delete 11 MeSH DESCRIPTOR Activities of Daily Living EXPLODE ALL TREES 337 Delete 12 MeSH DESCRIPTOR Rehabilitation, Vocational EXPLODE ALL TREES 49 Delete 13 MeSH DESCRIPTOR Recovery of Function EXPLODE ALL TREES 359 Delete 14 MeSH DESCRIPTOR Social Support EXPLODE ALL TREES 233 Delete 15 MeSH DESCRIPTOR Social Adjustment EXPLODE ALL TREES 49 Delete 16 MeSH DESCRIPTOR Social Facilitation EXPLODE ALL TREES 3 Delete 17 #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 3360 Delete 18 (dement*) IN DARE 486 Delete 19 (alzheimer*) IN DARE 304 Delete 20 MeSH DESCRIPTOR Alzheimer Disease EXPLODE ALL TREES 267 Delete	180	

	21 MeSH DESCRIPTOR Dementia EXPLODE ALL TREES 508 Delete 22 MeSH DESCRIPTOR Dementia, Vascular EXPLODE ALL TREES 17 Delete 23 MeSH DESCRIPTOR Dementia, Multi-Infarct EXPLODE ALL TREES 0 Delete 24 MeSH DESCRIPTOR Frontotemporal Dementia EXPLODE ALL TREES 2 Delete 25 MeSH DESCRIPTOR Lewy Body Disease EXPLODE ALL TREES 4 Delete 26 #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 803 Delete 27 #17 AND #26		
Primary studies			
CENTRAL	#1 MeSH descriptor: [Dementia] explode all trees 3449 #2 MeSH descriptor: [Alzheimer Disease] explode all trees 2005 #4 MeSH descriptor: [Activities of Daily Living] explode all trees 3488 #5 MeSH descriptor: [Occupational Therapy] explode all trees 483 #7Enter terms for searc#1 or #2 3449 #8Enter terms for searc#4 or #5 3833 #9Enter terms for searc#7 and #8 310	310	
PsycINFO	1. PsycINFO; exp DEMENTIA/; 49318 results. 2. PsycINFO; ALZHEIMER'S DISEASE/; 29789 results. 3. PsycINFO; 1 OR 2; 49318 results. 4. PsycINFO; ACTIVITIES OF DAILY LIVING/; 4002 results. 5. PsycINFO; OCCUPATIONAL THERAPY/; 4243 results. 6. PsycINFO; 4 AND 5; 141 results. 7. PsycINFO; 4 OR 5; 8104 results. 8. PsycINFO; 3 AND 7; 799 results. 9. PsycINFO; CLINICAL TRIALS/; 7005 results. 10. PsycINFO; random*.ti,ab; 122251 results. 11. PsycINFO; groups.ti,ab; 351021 results.	238	

	12. PsycINFO; (double adj3 blind).ti,ab; 17224 results. 13. PsycINFO; (single adj3 blind).ti,ab; 1319 results. 14. PsycINFO; EXPERIMENTAL DESIGN/; 8764 results. 15. PsycINFO; controlled.ti,ab; 76193 results. 16. PsycINFO; (clinical adj3 study).ti,ab; 7529 results. 17. PsycINFO; trial.ti,ab; 64389 results. 18. PsycINFO; "treatment outcome clinical trial".md; 24806 results. 19. PsycINFO; 9 OR 10 OR 11 OR 12 OR 13 OR 14 OR 15 OR 16 OR 17 OR 18; 541957 results. 20. PsycINFO; 8 AND 19; 238 results.		
Embase	9. EMBASE; exp DEMENTIA/; 215591 results. 10. EMBASE; ALZHEIMER'S DISEASE/; 118061 results. 11. EMBASE; 9 OR 10; 215591 results. 12. EMBASE; ACTIVITIES OF DAILY LIVING/; 54094 results. 13. EMBASE; OCCUPATIONAL THERAPY/; 15990 results. 14. EMBASE; 12 OR 13; 68360 results. 15. EMBASE; 11 AND 14; 5400 results. 16. EMBASE; 15 [Limit to: Exclude MEDLINE Journals]; 488 results. 17. EMBASE; random*.ti,ab; 843687 results. 18. EMBASE; factorial*.ti,ab; 21672 results. 19. EMBASE; (crossover* OR cross-over*).ti,ab; 67766 results. 20. EMBASE; placebo*.ti,ab; 194939 results. 21. EMBASE; (doubl* ADJ blind*).ti,ab; 140222 results. 22. EMBASE; (singl* ADJ blind*).ti,ab; 13889 results. 23. EMBASE; assign*.ti,ab; 231071 results. 24. EMBASE; allocat*.ti,ab; 79357 results. 25. EMBASE; volunteer*.ti,ab; 172715 results. 26. EMBASE; CROSSOVER PROCEDURE/; 38429 results. 27. EMBASE; DOUBLE BLIND PROCEDURE/; 117594 results. 28. EMBASE; RANDOMIZED CONTROLLED TRIAL/; 355975 results. 29. EMBASE; SINGLE BLIND PROCEDURE/; 18238 results.	67	

	30. EMBASE; 17 OR 18 OR 19 OR 20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27 OR 28 OR 29; 1366197 results. 31. EMBASE; 16 AND 30 [Limit to: Exclude MEDLINE Journals]; 67 results.		
Medline	8. MEDLINE; exp DEMENTIA/; 121077 results. 9. MEDLINE; ALZHEIMER'S DISEASE/; 68398 results. 10. MEDLINE; 8 OR 9; 121077 results. 11. MEDLINE; ACTIVITIES OF DAILY LIVING/; 50506 results. 12. MEDLINE; OCCUPATIONAL THERAPY/; 9974 results. 13. MEDLINE; 11 OR 12; 59378 results. 14. MEDLINE; 10 AND 13; 3576 results. 15. MEDLINE; "randomized controlled trial".pt; 385748 results. 16. MEDLINE; "controlled clinical trial".pt; 89206 results. 17. MEDLINE; randomized.ab; 300970 results. 18. MEDLINE; placebo.ab; 161988 results. 19. MEDLINE; "drug therapy".fs; 1751982 results. 20. MEDLINE; randomly.ab; 213027 results. 21. MEDLINE; trial.ab; 316927 results. 22. MEDLINE; groups.ab; 1355111 results. 23. MEDLINE; 15 OR 16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22; 3389002 results. 24. MEDLINE; 14 AND 23; 1141 results.	1141	

CINAHL	8. CINAHL; exp DEMENTIA/; 32479 results. 9. CINAHL; ALZHEIMER'S DISEASE/; 14001 results. 10. CINAHL; 8 OR 9; 32479 results. 11. CINAHL; ACTIVITIES OF DAILY LIVING/; 15607 results. 12. CINAHL; OCCUPATIONAL THERAPY/; 11845 results. 13. CINAHL; 11 OR 12; 26704 results. 14. CINAHL; 10 AND 13; 1482 results. 15. CINAHL; CLINICAL TRIALS/; 78834 results. 16. CINAHL; random*.ti,ab; 104352 results. 17. CINAHL; groups.ti,ab; 129476 results. 18. CINAHL; (double adj3 blind).ti,ab; 12160 results. 19. CINAHL; (single adj3 blind).ti,ab; 1654 results. 20. CINAHL; EXPERIMENTAL DESIGN/; 0 results. 21. CINAHL; controlled.ti,ab; 60412 results. 22. CINAHL; (clinical adj3 study).ti,ab; 9692 results. 23. CINAHL; trial.ti,ab; 62319 results. 24. CINAHL; "treatment outcome clinical trial".md; 1 results. 25. CINAHL; 15 OR 16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22 OR 23 OR 24; 284305 results. 26. CINAHL; 14 AND 25; 329 results.	329	
Summary	**NA**	**NA**	

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